

April 03, 2007

RECEIVED
CENTRAL FAX CENTER

APR 04 2007

REMARKS

Instant claims 1-4, 8-10, and 18-19 stand pending in this Application.

Summary Of Personal Interview With The Examiner

On February 16, 2007, Examiner Callie Shosho, Applicants' representative, Mr. Andrew Merriam, and Applicants' patent liaison, Dr. Andrew Bunn, conducted a personal interview to further prosecution in the instant application. During the interview, the parties discussed the propriety of and possible comparative showings to overcome the rejections outstanding on the record in relation to the instant claims. The Applicant wishes to thank the Examiner for extending the courtesy of a personal interview.

Statement Regarding Common Ownership Under 35 USC 103(c)

As of the time the instant invention was made, the instant application was subject to an obligation of assignment to Rohm and Haas Company.

As of the time the instant invention was made, U.S. Patent Application Serial No. 10/642,791, to Brown et al., was subject to an obligation of assignment to Rohm and Haas Company.

As shown in the preceding two paragraphs, on the date of the instant invention each of the instant application, and U.S. Patent Application Serial No. 10/642,791 was subject to an obligation of assignment to the same person, Rohm and Haas Company. Further, the instant application has an effective filing date of December 19, 2002, whereas U.S. Patent Application Serial No. 10/642,791 was published on March 18, 2004. Therefore, U.S. Patent Application Serial No. 10/642,791 is available as prior art only under 35 USC § 102(e), (f) and (g). Accordingly, U.S. Patent Application Serial No. 10/642,791, is not available as prior art under 35 USC § 103. 35 USC § 103(c).

Double Patenting

Claims 1-4, 6, 8-10, and 18-19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of Application Serial No. 10/642,791 in view of Dersch *et al.* (U.S. 6,492,451). Applicants respectfully traverse this rejection. Application Serial No. 10/642,791 and the instant

April 03, 2007

application are commonly owned. See the Statement of Common Ownership, above. Accordingly, the rejections are improper and should be withdrawn.

Claim Rejections: 35 U.S.C. §102(b)

Claim 18 is rejected under 35 U.S.C. §102(b) as being anticipated by Ma *et al.* (U.S. 6,247,808), hereafter "Ma". Applicants respectfully traverse this rejection.

Ma fails to disclose a polymer composition comprising aqueous emulsion polymer particles comprised of polymerized units of phosphorus acid monomer having first phosphorus acid groups and a water soluble polymer having second phosphorus acid groups, the particles comprising a ratio of equivalents of second phosphorus acid groups to equivalents of first phosphorus acid groups of less than or equal to 1.5, as instantly recited in claim 18. Further, Ma fails to disclose emulsion polymerization to make a polymer comprising phosphorus acid monomer at a pH of less than 2, as instantly recited. Contrast the instant claims with Ma at col. 8, lines 33-45 and col. 9, lines 16-18 (any polymer described therein is a low molecular weight polymeric dispersant). In fact, Ma fails to disclose any polymerization methods for phosphorus acid monomers or any acid monomer.

As shown in the enclosed Rule 132 Declaration of inventor Ward Brown, a polymer made by the closest art disclosed fails to meet the instantly recited ratio of equivalents of second phosphorus acid groups to equivalents of first phosphorus acid groups of less than or equal to 1.5. In contrast to the all of the cited art, emulsion polymerization of phosphorus acid monomer at a pH of 2 or less, as instantly recited, does provide polymer particles defined by such a ratio. See, for example, page 12, line 27, to page 13, line 15 of the instant specification and Example 1 at the paragraph bridging pages 26 and 27. Accordingly, Ma fails to inherently include each and every feature of the instant invention and Ma fails to disclose each and every feature of the rejected claim. As Ma does not anticipate claim 18, the rejection should be withdrawn.

APR 04 2007

U.S.S.N. 10/730,353
Req. for Recon AF

April 03, 2007

Claim Rejections: 35 U.S.C. §102(e)

Claims 18 and 19 are rejected under 35 U.S.C. §102(e) as being anticipated by Dersch *et al.* (U.S. 6,492,451), hereafter "Dersch". Applicants respectfully traverse this rejection.

Dersch fails to disclose compositions having a level of water soluble polymer having second phosphorus acid groups defined by the ratios of equivalents of second phosphorus acid groups to equivalents of first phosphorus acid groups in the range of less than or equal to 1.5, as instantly recited. Further, as the rejection admits, Dersch fails to disclose polymers prepared by aqueous emulsion polymerization of phosphorus acid monomer at a pH of less than 2, as instantly recited. Aqueous emulsion polymerization of phosphorus acid monomer at a pH of less than 2 provides one way to limit the amount of water soluble polymer having second phosphorus acid groups. See, for example, the instant specification at page 12, line 27, to page 13, line 15 and Example 1 at the paragraph bridging pages 26 and 27.

The rejection states that Applicants have not shown that Dersch fails to disclose compositions having a level of water soluble polymer having second phosphorus acid groups defined by the ratios of equivalents of second phosphorus acid groups to equivalents of first phosphorus acid groups in the range of less than or equal to 1.5. The enclosed Rule 132 Declaration of Inventor Ward Brown, a polymer made by the closest art of Dersch (Dispersion D1 on column 12, line 55 to column 13, line 49) fails to meet the instantly recited ratio of equivalents of second phosphorus acid groups to equivalents of first phosphorus acid groups of less than or equal to 1.5. See the Rule 132 Declaration of inventor Ward Brown at items 4, 5 and 6. In fact, virtually all of the phosphorus acid monomer in the closest art of Dersch (and any other art disclosed in Dersch) becomes water soluble polymer.

Because Dersch fails to disclose each and every feature of the rejected claims, Dersch fails to anticipate the claims of the instant application.

Claims 1-4, 6, 8-10, and 18-19 are rejected under 35 U.S.C. §102(e) as being anticipated by Edwards *et al.* (U.S. 7,101,921), hereafter "Edwards". Applicants respectfully traverse this rejection.

April 03, 2007

As the rejection admits, Edwards fails to disclose polymer particles prepared by aqueous emulsion polymerization of phosphorus acid monomer at a pH of less than 2, as instantly recited. See Edwards at column 8, lines 46-49, at col. 11, lines 33-62 and contrast Comparative Example A in the instant specification at page 27, 1st and 2nd full paragraphs (Comparative Example A has a pH above 2.0 and yet it has more and stronger acid monomer than the Examples of Edwards). Aqueous emulsion polymerization of phosphorus acid monomer at a pH of less than 2 provides one way to limit the amount of water soluble polymer having second phosphorus acid groups. See, for example, the instant specification at page 12, line 27, to page 13, line 15 and Example 1 at the paragraph bridging pages 26 and 27.

Further, Edwards fails to disclose compositions having a level of water soluble polymer having second phosphorus acid groups defined by the ratios of equivalents of second phosphorus acid groups to equivalents of first phosphorus acid groups in the range of less than or equal to 1.5, as instantly recited.

The rejection states that Applicants have not shown that Edwards fails to disclose compositions having a level of water soluble polymer having second phosphorus acid groups defined by the ratios of equivalents of second phosphorus acid groups to equivalents of first phosphorus acid groups in the range of less than or equal to 1.5. The enclosed Rule 132 Declaration of inventor Ward Brown, a polymer made by the closest Example of a phosphorus acid monomer polymerization (Dispersion D1 on column 12, line 55 to column 13, line 49 of Dersch) fails to meet the instantly recited ratio of equivalents of second phosphorus acid groups to equivalents of first phosphorus acid groups of less than or equal to 1.5. See the Rule 132 Declaration of inventor Ward Brown at items 4, 5 and 6. In fact, virtually all of the phosphorus acid monomer in the closest art (and any other art disclosing polymerization of phosphorus acid monomer) becomes water soluble polymer.

Edwards fails to disclose each and every feature of the rejected claims and Edwards fails to anticipate the claims of the instant application. The rejections should be withdrawn.

Claim Rejections: 35 U.S.C. §103(a)

APR 04 2007

U.S.S.N. 10/730,353
Req. for Recon AF

April 03, 2007

Claims 1-4, 6, 8-10, and 18-19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Brown et al. (U.S. 2004/0054063; "Brown"), in view of Dersch et al. (U.S. 6,492,451; "Dersch"). Applicants respectfully traverse this rejection.

In view of the Statement of Common Ownership presented above, Applicants respectfully submit that Brown is not available for a 35 U.S.C. §103(a) rejection. This rejection should be withdrawn.

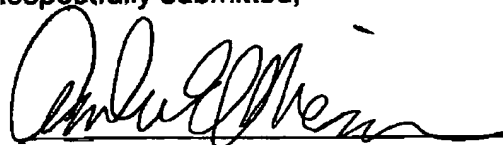
CONCLUSION

Based on the foregoing, the instant claims are believed to be in condition for allowance. Applicants' attorney thanks the Examiner for the time taken to review this response.

Enclosed herewith, please find the Rule 132 Declaration of inventor Ward Brown.

The Applicants request early and favorable action, including allowance of claims 1-4, 8-10, and 18-19 in light of the foregoing remarks.

Respectfully submitted,



Andrew Merriam
Attorney for the Applicant
Registration No. 47,268
Telephone No.: 215-592-6758

April 3, 2007
Rohm and Haas Company
100 Independence Mall West
Philadelphia, PA 19106-2399